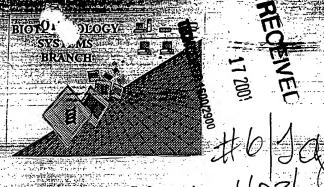
RAWSEQUENCE LISTING



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC), detected errors when processing the following computer readable form:

Application Serial Number: 09/486, 623

Source: 1631

Date Processed by STIC: 01-04-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin30help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

SERIAL NUMBER:

ERROR DETECTED SUGGESTED CORRECTION

ЛТТА	I: NEW RULES CASES: F	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1	Wrapped Nucleics	The number/text at the end of each line "wrapped" down to the next line.
		This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
2	Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line.
	•	This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
3	Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.
4	Misaligned Amino Acid	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
	Numbering	between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
5	Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
		Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
6	Variable Length	Sequence(s) contain n's or Xaa's which represented more than one residue.
	•	As per the rules, each n or Xaa can only represent a single residue.
		Please present the maximum number of each residue having variable length and
		indicate in the (ix) feature section that some may be missing.
7	Patentin ver. 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
	·	sequence(s) Normally, Patentin would automatically generate this section from the
		previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
		to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
		sections for Artificial or Unknown sequences.
я.	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
·	(OLD RULES)	(2) INFORMATION FOR SEQ ID NO:X:
	(OLD NOCES)	(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
		(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
		This sequence is intentionally skipped
		Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
9	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
	(NEW RULES)	<210> sequence id number
		<400> sequence id number
		000
10	Use of n's or Xaa's	Use of n's and/or Xaa's have been detected in the Sequence Listing.
	(NEW RULES)	Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
		In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
11	Use of <213>Organism	Sequence(s) are missing this mandatory field or its response.
	(NEW RULES)	
/	·,	· · · · · · · · · · · · · · · · · · ·
12 🗸	Use of <220>Feature	Sequence(s) are missing the <220>Feature and associated headings.
	(NEW RULES)	Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
		Please explain source of genetic material in <220> to <223> section.
		(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
40	D	Discourse de material Bounda Biologico de Botanillo de Constitución de Constit
13	Patentin ver. 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted
		file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).

Instead, please use "File Manager" or any other means to copy file to floppy disk.

N. M. Meschul

Page 1 of 7

RECEVE 1631

1720 Does Not Comply

Does Not Comply

Corrected Diskette Needed

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623

DATE: 01/04/2001 TIME: 08:38:43

Imput Set : A:\Isis3292.app

Output Set: N:\CRF3\01042001\I486623.raw

```
3 <110> APPLICANT: Nielsen, Peter E
      5 <120> TITLE OF INVENTION: Peptide Nucleic Acids Having Antibacterial Activity
      7 <130> FILE REFERENCE: ISIS3292
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/486,623
C--> 10 <141> CURRENT FILING DATE: 2000-07-06
     12 <150> PRIOR APPLICATION NUMBER: 08/932,140
     13 <151> PRIOR FILING DATE: 1997-09-16
                                                                                            Aucleic shown.

Sequences

Sequences

Peptide
     15 <160> NUMBER OF SEO ID NOS: 27
     17 <170> SOFTWARE: Patentin Ver. 2.1
     1.9 <210> SEQ ID NO: 1
     20 <211> LENGTH: 14
     21 <212> TYPE: DNA
     22 <213> ORGANISM: Artificial Sequence
     24 <220> FEATURE:
     25 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
     27 <400> SEQUENCE: 1
     28 tgaccatgat tacg)
                                                                                14
     31 <210> SEQ ID NO: 2
     32 <211> LENGTH: 17
     33 <212> TYPE: DNA
     34 <213> ORGANTSM: Artificial Sequence
     36 <220> FEATURE:
     37 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
     39 <400> SEQUENCE: 2
     40 (Eacqtgtttc ctgtgtg)
                                                                                1.7
     43 <210> SEQ ID NO:
     44 <211> LENGTH: 17
                                                                                     what is the genetic the genetic the genetic the genetic at the genetic at the genetic actificial seguences.

See # 12 on Sheet.

Error

Error
     45 <212> TYPE: DNA
     46 <213> ORGANISM: Artificial Sequence
     48 <220> FEATURE:
     49 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
     51 <400> SEQUENCE: 3
     52 qaqtattcaa catttcc
                                                                                17
     55 <210> SEQ TD NO:
     56 <211> LENGTH: 17
     57 <212> TYPE: DNA
     58 <213> ORGANISM: Artificial Sequence
     60 <220> FEATURE:
     61 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
     63 <400> SEQUENCE: 4
     64 attiguettee tittea
                                                                                17
     67
        <210> SEO TD NO: 5
     68 <211> LENGTH: 15
     69 <212> TYPE: DNA
     70 <213> ORGANISM: Artificial Sequence
     72 <220> FEATURE:
     73 <221> NAME/KEY: misc_feature
```



1.5

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/486,623

DATE: 01/04/2001 TIME: 03:38:43

Input Set : A:\Isis3292.app Output Set: N:\CRF3\01042001\I486623.raw

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74 <222> LOCATION: (1)..(14)
75 <223> OTHER INFORMATION: Modified site. N-acetyl (2-aminoethyl) glycine
76
         backbone
78 <220> FEATURE:
79 <221> NAME/KEY: misc_feature
80 <222> LOCATION: (15)
81 <223> OTHER INFORMATION: Modified site. N - [acetyl (2-aminoethy )] -C-
         lysine-glycine backbone
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
87 <400> SEQUENCE: 5
88 ggtcataget gtttc
91 <210> SEQ ID NO: 6
92 <211> LENGTH: 15
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <221> NAME/KEY: misc_feature
98 <222> LOCATION: (1)..(14)
99 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
100
          backbone
102 <220> FEATURE:
103 <221> NAME/KEY: misc_feature
104 <222> LOCATION: (15)
105 <223> OTHER INFORMATION: Modified Site. N- [acetyl (2-aminoethyl) ] -C-
106
          lysine-glycine backbone
108 <220> FEATURE:
109 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
111 <400> SEQUENCE: 6
116 tacteatact ettee
115 <210> SEQ ID NO: 7
                                                                        1.5
116 <211> LENGTH: 15
117 <212> TYPE; DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <221> NAME/KEY: misc_feature
122 <222> LOCATION: (1)..(14)
123 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
124
          backbone
126 <220> FEATURE:
127 <221> NAME/KEY: misc_feature
128 <222> LOCATION: (15)
129 <223> OTHER INFORMATION: Modified Site. N- [acetyl (2-aminoethyl) ] -C-
          lysine-glycine backbone
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
135 <400> SEQUENCE: 7
136 Gaatacteat actet
139 <210> SEQ ID NO: 8
```

refer



DATE: 01/04/2001 TIME: 08:38:43

PATENT APPLICATION: US/09/486,623

Input Set : A:\Isis3292.app
Output Set: N:\CRF3\01042001\I486623.raw

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141 <212> TYPE: DNA
142 <213> ORGANTSM: Artificial Sequence
144 <220> FEATURE:
145 <221> NAME/KEY: misc_feature
146 <222> LOCATION: (1)..(14)
147 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
148
          backbone
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (15)
153 <223> OTHER INFORMATION: Modified Site. N- [acetyl (2-aminoethyl) ] -C-
154
          Lysine-glysine backbone
156 <220> FFATURE:
157 <223> OTHER INFORMATION: Description of Artificial Sequence: (Peptide)
159 <400> SEQUENCE: 8
160 acgccacatc ttcgc
                                                                       15
163 <210> SEQ ID NO: 9
164 <21.1> LENGTH: 15
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (1)
171 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
1.72
          backbone
174 <220> FEATURE:
175 <221> NAME/KEY: misc_feature
176 <222> LOCATION: (2)..(4)
177 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl
178
          (2-aminoethyl) glycine backbone
180 <220> FEATURE:
181 <221> NAME/KEY: misc_feature
182 <222> LOCATION: (5). (6)
183 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
184
          backbone
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (7)
189 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl
          (2-aminoethyl) glycine backbone
190
192 <220> FEATURE:
193 <221> NAME/KEY: misc\_feature
194 <222> LOCATION: (8)
195 <223> OTHER INFORMATION: Modified Site.
196
          (0-2-aminoethyl-0'-acetyl-ethyleneglycol), (0-2-
197
          aminoethyl-O'-acetyl-ethyleneglycol),
198
          (0-2-aminoethyl-0'-acetyl-ethyleneglycol)
200 <220> FEATURE:
```

refer
for



DATE: 01/04/2001

TIME: 08:38:43

Input Set : A:\Isis3292.app Output Set: N:\CRF3\01042001\1486623.raw

```
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     202 <222> LOCATION: (9)..(14)
     203 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine
     204
              backbone
     206 <220> FEATURE:
     207 <221> NAME/KEY: misc_feature
     208 <222> LOCATION: (1.5)
     209 <223> OTHER INFORMATION: Modified Site. N- [acetyl (2-aminoethyl) ] -C-
     210
               lysine-glycine backbone
     212 <220> FEATURE:
     213 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide
     215 <400> SEQUENCE: 9
W--> 216 tnnnttnnct tccct
                                                                            1.5
     219 <210> SEQ ID NO: 10
     220 <211> LENGTH: 15
     221 <212> TYPE: DNA
     222 <213> ORGANISM: Artificial Sequence
```

refer to p.1

224 <220> FEATURE: 225 <221> NAME/KEY: misc_feature 226 <222> LOCATION: (1) 227 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosime-acetyl 228 (2-aminoethyl) glycine backbone 230 <220> FEATURE: 231 <221> NAME/KEY: misc_feature 232 <222> LOCATION: (2)..(4) 233 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine 234 backbone 236 <220> FEATURE: 237 <221> NAME/KEY: misc_feature 238 <222> LOCATION: (5)..(6) 239 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl 240 (2-aminoethyl) glycine backbone 242 <220> FEATURE: 243 <221> NAME/KEY: misc_feature 244 <222> LOCATION: (7) 245 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine 246 backbone 248 <220> FEATURE: 249 <221> NAME/KEY: misc_feature 250 <222> LOCATION: (9)..(14) 251 <223> OTHER INFORMATION: Modified Site, N-acetyl (2-aminoethyl) glycine 252 backbone 254 <220> FEATURE: 255 <221> NAME/KEY: misc_feature 256 <222> LOCATION: (8) 257 <223> OTHER INFORMATION: Modified Site. 258 (0-2-aminoethyl-0'-acetyl-ethyleneglycol),

(0-2-aminoethyl-0'-acetyl-ethyleneglycol), (0-2-aminoethyl-0'-acetyl-ethyleneglycol)

260

VERIFICATION SUMMARY

DATE: 01/04/2001

PATENT APPLICATION: US/09/486,623

TIME: 08:38:44

Input Set : A:\Isis3292.app
Output Set: N:\CRF3\01042001\I486623.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:270 C: Current Application Number differs, Replaced Current Applic L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:216 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:19 L:266 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:10 L:358 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:12 L:426 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:13 L:534 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:19 L:640 M:341 W: (46) "n" or "Xaa" used, for SEO 1D#:20



Creation date: 21-08-2003

Indexing Officer: TDANG5 - TIEN DANG

Team: OIPEBackFileIndexing

Dossier: 09486623

Legal Date: 23-04-2002

No.	Doccode	Number of pages
1	A	5
2	REM	6

Total number of pages: 11

Remarks:

Order of re-scan issued on